

IN THE SPECIFICATION

Please amend the specification as follows:

[010] FIG. 5A is a front isometric view of a device module that is mated with a motherboard connector, ~~according to an embodiment~~ according to an embodiment of the invention.

- 2 -

Application No. 10/756,924
Response to Office Action Mailed March 8, 2005

1. (Currently Amended) A device module comprising:
 - a circuit board;
 - a plurality of devices mounted to a first side of the circuit board;
 - a first set of contact points provided adjacent to a first side-lateral edge of the circuit board for connecting to a first external data bus;
 - a second set of contact points provided adjacent to a second side-lateral edge of the circuit board for connecting to a second external data bus;
 - a plurality of signal paths provided on the circuit board, each signal path extending between a first contact point in the first set of contact points and a second contact point in the second set of contact points, wherein the plurality of signal paths are interconnected to at least some of the plurality of devices mounted on the circuit board;
 - wherein the first lateral edge of the circuit board and the second lateral edge of the circuit board are provided on the first side of the circuit board; and
 - wherein each of the plurality of signal paths has substantially an identical length and a same number of turns on the board.
2. (Original) The device module of claim 1, wherein each of the plurality of signal paths includes a number of turns that is less than or equal to two.
3. (Currently Amended) The device module of claim 1, wherein the ~~board~~circuit board includes a bottom edge that is configured to be edge-mounted to a substrate, and wherein one of the first set of contact points for at least some of the plurality of signal paths is provided adjacent to the bottom edge and ~~is proximate to one of the lateral sides~~a first lateral edge and a second lateral edge, and wherein for each of the contact points provided adjacent to the bottom edge and proximate to one of the first and second lateral sides~~edges~~, a corresponding signal path has two turns on the ~~board~~circuit board.
4. (Currently Amended) The device module of claim 1, wherein the board includes a bottom edge that is configured to be edge-mounted to a substrate, and a first lateral edge and a second lateral edge ~~pair of lateral sides~~ that extend from the bottom edge, and

- 3 -

Application No. 10/756,924
Response to Office Action Mailed March 8, 2005

wherein each contact point in the first set of contact points is provided on or adjacent to one of ~~the the first lateral edge or the second lateral edge~~lateral sides, and wherein for each contact point in the first set, a corresponding signal path extends to a corresponding contact point in the second set, and wherein said corresponding signal path has less than two turns on the board.

5. (Original) The device module of claim 4, wherein for each contact point in the first set, the corresponding signal path that extends to the corresponding contact point in the second set has zero turns on the board.

6. (Original) The device module of claim 1, wherein at least some of the plurality of components are memory devices.

7. (Currently Amended) A system for providing high-speed interconnectivity ~~between a controller and a plurality of memory devices~~, the system comprising:
a set of one or more boards upon which ~~the a~~ plurality of memory devices are provided, wherein the set includes at least a first board on which at least some of the plurality of memory devices are provided;
a plurality signal paths provided on the first board, wherein each signal path in the plurality of signal paths includes a first set of contact points that interconnect the first board to the controller from a position that is proximate to a first lateral side of the first board, and a second set of contact points that interconnect the board to another component from another position that is proximate to a second lateral side of the first board, and wherein each of the plurality of signal paths has a substantially identical length and an identical number of turns between a contact point in the first set of contact points and a contact point in the second set of contact points;
wherein the plurality of signal paths have no vias; and
a bus connected to the first set of contact points and communicatively coupled to the controller.

- 4 -

Application No. 10/756,924
Response to Office Action Mailed March 8, 2005

8. (Original) The system of claim 7, wherein the bus is provided through a flex cable.
9. (Original) The system of claim 8, wherein an end of the flex cable is directly connected to the controller.
10. (Original) The system of claim 7, wherein the first board is edge-mounted to a motherboard on a bottom side, and wherein a contact point in the first set of contact points for at least some of the plurality of signal paths is provided adjacent to a bottom edge, and wherein for each contact point provided adjacent to the bottom edge, the signal path of that contact point has two turns on the board.
11. (Original) The system of claim 7, wherein the first set of contact points and the second set of contact points are positioned on the first board so that the signal path extending between a contact point in the first set of contact points and a contact point in the second set of contact points has less than two turns on the board.
12. (Original) The system of claim 7, wherein the first set of contact points and the second set of contact points are positioned on the first board so that the signal path extending between a contact point in the first set of contact points and a contact point in the second set of contact points has zero turns on the board.
13. (Original) The system of claim 7, further comprising a motherboard upon which the controller and the set of one or more boards are mounted, and wherein the bus is external to the motherboard.
14. (Original) The system of claim 7, wherein the first board is connected to a second board in the set via a second bus provided on a flex cable.

- 5 -

Application No. 10/756,924
Response to Office Action Mailed March 8, 2005

15. (Original) The system of claim 14, wherein the first board and the second board are each mounted to a motherboard.

Claims 16-22 Cancel

23. (New) A system comprising:

a first module and a second module, each of the first module and second module comprising:

- a circuit board;

- a plurality of devices mounted to a first side of the circuit board;

- a first set of contact points provided on a first lateral end adjacent to a first edge of the circuit board for connecting to a first external data bus;

- a second set of contact points provided on a second lateral end adjacent to a second edge of the circuit board for connecting to a second external data bus;

- and

- a plurality of signal paths provided on the circuit board, each signal path extending between a first contact point in the first set of contact points and a second contact point in the second set of contact points, wherein the plurality of signal paths are interconnected to at least some of the plurality of devices mounted on the circuit board;

- wherein the first edge of the circuit board and the second edge of the circuit board are provided on the first side of the circuit board; and

- wherein each of the plurality of signal paths has substantially an identical length and a same number of turns on the board; and

- wherein with respect to a common reference point of the first module and the second module, (i) the first lateral end of the first device module and the second device has a same leftward or rightward orientation, and (ii) the second lateral end of both of the first device module and the second device module is has a same leftward or rightward orientation; and

- wherein the system further comprises a flexible circuit connected to the first module and the second module, the flexible circuit comprising one or more signal paths

- 6 -

Application No. 10/756,924

Response to Office Action Mailed March 8, 2005

forming a bus for conveying signals from the second set of contact points of the first module to the first set of contact points of the second module.

24. (New) The system of claim 23, further comprising:

a printed circuit board; and

a second flexible cable having one or more signal paths that connect to the first set of contact points of the first module and the printed circuit board, so as to form a bus for conveying signals from the first module to the printed circuit board.

25. (New) The system of claim 23 further comprising:

a controller;

a second flexible cable having one or more signal paths that connect to the first set of contact points of the first module and the printed circuit board, so as to form a bus for conveying signals from the first module to the printed circuit board.

- 7 -

Application No. 10/756,924
Response to Office Action Mailed March 8, 2005